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Does Intermarriage Pay off?
A Panel Data Analysis

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Does Intermarriage Pay off? A Panel Data Analysis

Olga Nottmeyer*

Abstract

Taking advantage of the panel structure of the data, the impact of intermarriage on labor market productivity as measured by earnings is examined. Contrarily to previous studies which rely on instrumental variable techniques, selection issues are addressed within a fixed effects framework. The model accounts for short and long term effects as well as general differences between those who intermarry and those who do not. Once unobserved heterogeneity is incorporated, advantageous effects from intermarriage vanish and do not differ from premiums from marriage between immigrants. However, immigrants who eventually intermarry receive greater returns to experience indicating better labor market integration.

JEL-Classification: J1, J12
Keywords: intermarriage, integration, labor market, migration

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1 Introduction

Suppose love creates the closest relationship possible between two people and ideally drives the decision to marry. Further assuming that each person is intrinsically tied to his or her family and marked by his or her ethnic origin, marriage between people with different ethnic backgrounds expresses the closest feasible connection to the culture of the spouse. Marriages and marriage-like partnerships between immigrants and natives, termed 'intermarriage', are thus commonly considered to be an indicator of a high level of social integration, an index of assimilation, an indicator of social distance and cultural proximity, as well as an intimate link between social groups (Prince and Zubrzycki (1962), Gurak and Fitzpatrick (1982), Klein (2001), Kalmijn (1998), and Muttarak (2004)).

For this reason, studies analyzing marriages between persons of different ethnicity or race have a long history, especially in traditional immigrant nations like the United States. Against the backdrop of the current political debate concerning the successful integration of immigrants and Germany's status as an immigration country, it is important to examine in greater depth the connections between intermarriage and economic status of immigrants in Germany. Thus the aim of this paper is to analyze the effect of intermarriage on economic success for immigrants in Germany.

When studying the relation between intermarriage and labor market outcomes, two competing hypotheses are relevant: (a) the *productivity hypothesis*, and (b) the *selection hypothesis*. According to the *productivity hypothesis*, intermarriage fosters economic integration as native spouses boost linguistic adjustment, provide knowledge of the local labor market, access to social networks, and insight

into important structures. In addition, they explain local customs, norms, and peculiarities. Daily practice with the spouse enables intermarried immigrants to better communicate with native colleagues and to become better integrated into the working environment. Furthermore, intermarriage signals greater adaptability to the host country's society and a high level of familiarity with its foreign culture.

However, if intermarriage basically reflects commitment and the decision to stay immigrants who intermarry may experience economic success resulting only from their greater attachment. Those who intermarry may be more eager to acquire precious skills that are highly valued in the labor market, and meeting a native partner is merely a side product of this process. In addition, economic outcomes could be affected by other unobservable productivity characteristics correlating with intermarriage. Thus, according to the *selection hypothesis*, the relationship between intermarriage and economic success is spurious, and effects from intermarriage are biased if the self-selection into intermarriage based on individual factors is ignored. Consequently, intermarriage needs to be viewed as treatment that is possibly endogenously related to economic outcomes.

The empirical analysis benefits from using German Socio-Economic Panel (SOEP) data. Panel data is more appropriate than cross-section data for this type of study because it allows to control for unobserved heterogeneity. Its longitudinal design provides a different estimation method from previous studies, which are predominately based on cross-sectional observations and rely on instrumental variables to control for self-selection. Instead, in this paper, a fixed effects regression framework is used to resolve the omitted variable problem. In addition, the empirical specification allows for the different timing of possible effects of intermarriage and accounts for general marital pay differentials. The empiri-

cal analysis considers both men and women, while briefly examining the possible effects of intermarriage for natives.

Empirical findings indicate that male immigrants' immediate benefits from intermarriage are mainly driven by unobserved time-constant factors and vanish once selection into marriage is taken into account. In this regard, effects do not differ statistically between intermarriage and marriage between two immigrants. However, those who eventually live with natives receive greater returns to labor market experience indicating generally enhanced productivity. Thus, intermarriage seems to signal greater economic integration. Native men do not receive any extra benefit from either marriage type, while native women seem to gain an advantage from marrying an immigrant. Immigrant women, on the other hand, do not benefit from either type of marriage, although negative effects are mitigated when controlling for unobserved factors and other observable characteristics. However, results for women must be treated carefully as selection issues related to their labor market participation are mainly set aside.

Within the upcoming chapter a short overview of German-specific facts and theoretical concepts related to intermarriage are presented. This includes a literature review of studies that analyze the determinants of intermarriage and its impact on economic assimilation in other countries. The empirical model is introduced in Section 3. Due to Germany's immigration history, definition issues are discussed separately in Section 4. Descriptive statistics of the underlying sample are given in Section 5. In Section 6 estimation results and its interpretation are presented. The paper finally concludes with a summary and an outlook for further research.

2 Background

Only in the years after 2000 did Germany acknowledge its status as an immigration nation. At the same time there is greater government attention to integrating immigrants. German-language requirements, accepting Germany's democratic norms, and accepting the rule of law are mandatory for those wanting to naturalize. But beyond language fluency and other indicators such as educational success and employment status, marriage to natives is generally considered a test of integration.[1]

In contrast to traditional immigrant countries like the United States, research on intermarriage in Germany began comparably late. However there is much interest in understanding marriage patterns among immigrants in Germany. A significant part of the literature examines the social and economic factors fostering interethnic partnerships. Thus, most studies focus on describing marriage patterns and its determinants leaving aside economic implications (Kane and Stephan (1988); Klein (2001); Haug (2006); Schroedter (2006)).

According to that strand of literature, structural constraints in the marriage market such as gender ratios and partner availability (Angrist (2002)), as well as interference by third parties, religious beliefs, socio-economic status, as well as cultural and linguistic proximity are the principle influences on the likelihood to intermarry. In addition, in certain cases intermarriage is related to the acquisition of citizenship and permanent residency, depending on legal status and country of origin. In this regard, intermarriage may be one possible way to legally immigrate

[1]The *Ethnosizer* is another measures of social integration, see Zimmermann, Zimmermann, and Constant (2007); Zimmermann (2007); Constant and Zimmermann (2008); Constant, Gataullina, and Zimmermann (2009).

to a foreign country. On the other hand, 'importing' spouses from their country of origin is sometimes the only legal route for admittance to the host country (Gonzàles-Ferrer (2006); Lievens (1999)). Thus, the likelihood of intermarriage is expected to differ by country of origin.

In addition, personal characteristics such as individual preferences, age, years since immigration, language abilities, and education are among the most relevant determinants of intermarriage (Lievens (1998); Chiswick and Houseworth (2008); Kalmijn (1998); Kalmijn (1991); Bisin and Verdier (2000); Bisin, Topa and Verdier (2004)).

As stated by Becker (1974), individuals generally prefer spouses with similar bundles of resources. Thereby the partner does not have to have the exact same level in each characteristic, but needs to compensate for shortages in one area by offering richness upon another. In particular, people usually prefer partners with similar education levels, which is called *assortative mating by education* (Chiswick and Houseworth (2008)). Moreover, highly educated immigrants are expected to intermarry more often as discussed by Furtado (2006) and Furtado and Theodoropoulos (2010). Accordingly, and apart from the fact that educational institutions provide platforms to meet potential partners, higher education accompanied by better communication skills enable immigrants to approach others, including natives, and help improve adaptation to different cultural habits (*adaptability effect*). Furthermore, highly educated immigrants are more likely to move away from ethnic enclaves and to live in neighborhoods with predominately native inhabitants. This, in turn, increases the likelihood of intermarriage (*enclave effect*).[2] Consequently, intermarried immigrants are likely to be a highly selective,

[2]In addition, German law favors immigration of highly educated people who seek to immigrate

well educated subgroup of the total immigrant population.

This illustrates how important selection issues are when analyzing the relationship between intermarriage and labor market outcomes. Consequently, two competing hypotheses are crucial in this context: (a) the *productivity hypothesis*, and (b) the *selection hypothesis*. According to the first, immigrants who intermarry assimilate faster to the host society due to greater productivity fostered by the native spouse. In that regard, intermarriage can be beneficial for several reasons. Marriage to a native person can foster language acquisition, provide access to social networks, open up valuable contacts and occupation opportunities, ease the process of adapting to a foreign country, help to understand unfamiliar customs and norms, as well as help to learn the unique host-country peculiarities and requirements. Consequently, intermarriage can increase the feeling of belonging and lead to greater acceptance. Intermarriage can thus contribute positively to the well-being of immigrants who, as a result, become more productive.

Contrarily, according to the *selection hypothesis*, the relationship between intermarriage and higher assimilation rates of immigrants is spurious due to sample selection. Immigrants who marry native spouses possibly belong to a highly selective sample of immigrants who possess highly valued labor market skills that are also highly valued in the native marriage market (Kantarevic (2004)). Consequently, the effect of intermarriage on wages is biased if selection into marriage is not taken into account.[3]

based on marriage to a German national. Immigrants coming from EU-member states and other well developed countries, such as the United States, Canada, Australia, New Zealand, Switzerland, Japan, South Korea or Israel, face fewer hurdles for marriage-based immigration than immigrants from less developed countries.

[3]These arguments are mainly derived from research on the male marriage premium as discussed by Nakosteen and Zimmer (1987); Korenman and Neumark (1991); Loh (1996); Hersch and Stratton (2000); Ginther and Zavodny (2001); Antonovics and Town (2004); Dougherty

Beyond that, intermarriage can induce costs, especially psychological ones, which can even have the opposite effect. As shown by Bratter and Eschbach (2006), intermarriage is associated with an increase in severe distress for some immigrant groups in the United States. Immigrants marring spouses from different ethnic groups may no longer be supported by members of their own ethnic group. They face a lack of understanding and feel detached from their ethnic group, and, as a consequence, rely neither on family ties nor social networks from their ethnic community to find a job. This, in turn, decreases the possibility of finding a job that matches immigrant's capabilities.[4] In addition, immigrants in intermarriage may face intolerance from the native partner's side. Relatives and friends may fail to tolerate and accept unfamiliar ways of living and unaccustomed perspectives. Consequently, intermarried couples face many difficulties from both the ethnic group of the immigrant partner and the native society.

Finally, different perceptions and norms challenge the couple, thus inducing a high potential for conflicts within the marriage.[5] Kalmijn, Graaf and Janssen (2005) find a positive correlation between intermarriage and divorce, thus supporting the assumption that intermarriage faces greater stress than 'intra-immigrant marriages', that is marriage between two immigrants. Hence, even though intermarriage is associated with many benefits it can also be costly.

Analyzing the economic assimilation of intermarried immigrants in the United States, Kantarevic (2004) finds evidence for an intermarriage premium in terms of higher earnings if selection into marriage is ignored. Once selection is taken into

(2006); Cornwell and Rupert (2007); Chen (2007).

[4]As argued by Furtado and Theodoropoulos (2009a), intra-immigrant marriage fosters better employment matches in terms of qualification than intermarriage.

[5]See Stöcker-Zafari (2007) for real life experiences of intermarried couples.

account, the premium from marrying a native partner vanishes. In contrast, Meng and Gregory (2005) analyzing the impact of intermarriage for immigrants in Australia, find evidence for a premium from intermarriage even after controlling for unobservable characteristics. These findings are supported by Meng and Meurs (2006) in their study of intermarried immigrants in France. Other studies, focusing on immigrants in Sweden (Dribe and Lundh (2008)) and the Netherlands (Gevrek (2009)), find positive effects on wages for Swedish immigrants and positive correlations between intermarriage and economic outcomes for Dutch immigrants. Furtado and Theodorpopoulos (2009a) and (2009b), as well as Georgarakos and Tatsiramos (2009) focus on labor market outcomes such as employment probabilities, network effects, and self-employment, and find positive effects from intermarriage for immigrant men in the United States. However, little is known about the relationship between intermarriage and economic performance of immigrants in Germany. Thus, this paper aims at filling this gap in the literature.

3 The Model

Most studies exploring the relation between intermarriage and earnings are based on instrumental variable approaches in cross sectional settings. The authors account for endogeneity of intermarriage by using specific ethnic group and gender ratios that measure the availability of partners within ethnic groups. The underlying assumption is that these ratios determine partner choice but are exogenous in the earnings equation.

In contrast, the model used here relies on a fixed effects (FE) approach to account for unobserved heterogeneity. The earnings equation is derived from a

Mincer (1974) wage equation and allows for individual specific factors in the error term. It follows a model proposed by Bratsberg, Ragan, and Nasir (2002) who measure the effect of naturalization on wage growth. The advantage of this model is that it allows for different timings for the effects on wages while mitigating selection biases induced by time-constant individual characteristics.

The model accounts for both short and long term effects on earnings, whereby long term effects are measured via experience acquired in the course of marriage. Short term effects are captured by the immediate change in marital status. Furthermore, immigrants who eventually intermarry may principally invest differently in their human capital. Being intermarried then proxies better economic integration in general, and those who marry natives benefit more from experience acquired in the local labor market than those immigrants who remain single or marry other immigrants.

The earnings equation looks as follows[6]:

$$\ln w_{it} = \alpha_0 Mig_{it} + \beta_0 Nat_{it} + \alpha_1 Mig_{it}(X_{it} - X_{iMig}) + \beta_1 Nat_{it}(X_{it} - X_{iNat}) + \alpha_2 \bar{Mig}_i X_{it} + \beta_2 \bar{Nat}_i X_{it} + \zeta_1 X_{it} + \zeta_2 X_{it}^2 + \zeta_3 Z_{it} + \mu_i + u_{it}.$$

Thereby, the dependent variable, w_{it}, denotes monthly labor gross earnings of immigrant i in period t, and is used as the productivity measure for individual i. Nat_{it} is an indicator variable which equals one if in period t person i is married to a native and zero else. The immediate effect of intermarriage for immigrants is then captured by β_0. A supplementary regressor, Mig_{it}, denotes marriage with another immigrant. Consequently, Mig_{it} and Nat_{it} capture effects from each type

[6] As an extension, square terms $Nat_{it}(X_{it} - X_{iNat})^2$ and $Mig_{it}(X_{it} - X_{iMig})^2$ are included to account for decreasing returns to experience.

of marriage in comparison to those who are unmarried at this point in time. [7]

Apart from short term effects, marriage may affect labor market success gradually. For that reason, Korneman and Neumark (1991) include duration of marriage as an additional regressor. Here, a different measure is used: X_{it} and X_{iNat} (X_{iMig}) refer to labor market experience in period t and at the point of intermarriage (marriage with an immigrant). For immigrants the difference between X_{it} and X_{iNat} therefore captures experience gained during intermarriage. Equivalently, the difference between X_{it} and X_{iMig} captures experience gained in the course of marriage with an immigrant.

In case α_1 and β_1 are greater than zero, immigrants benefit from additional labor market experience acquired during the marriage compared to those who remain single. This might be due to favorable specialization within the marriage. Negative coefficients could result from less flexibility and less mobility in comparison to singles, or stem from a lack of possibilities to search for jobs that optimally match one's abilities. Different signs of α_1 and β_1 could indicate different search patterns, gender roles, or human capital allocations within the marriage.

Apart from short and long term effects, the decision to eventually intermarry may reflect greater commitment to the hosting country in general. Immigrants who find a native partner may be more attached to the hosting country than those who never intermarry. They may have invested in human capital specific to the local labor market and developed precious skills that are highly valued possibly independent of the current marital status. As a consequence, those who eventually intermarry may obtain greater returns to their labor market experience than others.

[7] Regarding natives, the interpretation of the coefficients goes exactly the opposite direction: In this case, Nat_{it} refers to marriage with a native and Mig_{it} refers to intermarriage.

To account for that, $\bar{Nat}_i$ is included as a time-invariant indicator for immigrants who eventually marry a native spouse. The variable is set to one in the years prior, during and after an intermarriage, assuming that abilities can be gained beforehand and need not become redundant with the end of marriage. Because relationships change with time, $\bar{Nat}$ refers to those who may have several but always native partners. Thus, if $\beta_2 > 0$ greater returns to experience are permitted for immigrants who eventually live with native spouses. Immigrants who exclusively marry within the immigrant community are denoted by $\bar{Mig}_i$.[8] Consequently, persons who remain single the whole time are the base category.[9]

Parameters ζ_1, ζ_2 and ζ_3 refer to returns to experience, X_{it}, its square term, X_{it}^2, and to returns to other observable characteristics captured in Z_{it}. Experience in this context refers to experience in full-time employment acquired in the host country. Z_{it} includes education indicators, self-reported language proficiency, firm size, actual hours worked, tenure and its square term, full-time work, as well as region and industry dummies. Even though years since migration seem to be an important determinant of the probability to intermarry, as argued among others by Chiswick and Housworth (2008), it is not included in Z_{it} as it evolves similar to experience. Hence, it is not possible to separate the effects of experience and years elapsed in the country.[10] Furthermore, marriage could result from an increase in

[8]These variables are difficult to construct because they include all past and future decisions which are typically not observed in the data. Ideally, we would like to compare people for whom we have information about the whole life time and not just occasional short observation periods. However, this information is not available. So we can only consider the observation period and distinguish between those who report a native partner within this time frame and those who report no or an immigrant partner.

[9]Those who have both immigrant and native partners are not considered to reduce complexity.

[10]Both variables generally move together, increasing by one each year. Although, they might not always be perfectly collinear, any differences are probably due to endogenous labor supply decisions. As the model concentrates on returns to experience, years spent in the country are not included in the regression.

earnings in previous periods. To account for this correlation and possible reverse causality, dummy variables denoting marriage with a native or with an immigrant in the next period are included.

Finally, intermarried immigrants may possess different unobservable productivity characteristics which correlate with the decision to intermarry. The composite error term therefore consists of a time-invariant individual heterogeneity term, μ_i, and an idiosyncratic part, u_{it}.

4 Definitions

Before turning to the data description, some remarks are necessary to understand possible difficulties related to the definition of immigrants in Germany.

German law defines *Germans* as persons holding German citizenship. In Germany, *Ausländer* (foreigners) are those holding citizenship from a foreign country only. As Germany does not grant citizenship to those born on German soil, children of foreign parents usually hold the same citizenship as their parents. If one parent is a German citizen, a child can gain dual citizenship. Persons with dual (German and foreign) citizenship count as Germans by the German Statistical Office (*Statistisches Bundesamt Deutschland*).[11] Although Germany loosened its very strict naturalization law for children of first-generation foreigners, there are members of the second and third generations who have not naturalized. In nationality statistics, they are counted as foreigner regardless of how long they have lived in Germany.

[11] Between ages 18 and 23, children with dual citizenship must choose one citizenship, as mandated by a law passed in 2000 commonly known as the *option model*. People with dual nationality are not counted as foreigners in official statistics that use nationality as the single criteria.

Defining immigrant status by nationality is technically easy. Following this definition, intermarriage refers to marriage between a German citizen and someone who does not hold German citizenship, regardless of where that person was born. For example, an intermarriage by nationality could involve a German-citizen woman and the Turkish-nationality, German-born son of a Turkish guest worker.[12] It would also include, misleadingly, marriages between naturalized citizens and non-citizens who are both of Turkish background, for example.

Furthermore, nationality and, by that, intermarriage status can change over time if the non-citizen spouse naturalizes. Therefore, nationality does not sufficiently capture cultural diversity in the family. In contrast, country of birth remains unchanged also after naturalization. Combining information about nationality and country of birth therefore better reflects cultural influences in childhood and throughout adult life. Including parental nationality and country of birth incorporates familial immigration and allows the distinction between immigrant generations.[13]

Accordingly, *first generation immigrants* are defined as persons who are not born in Germany. Those who are born in Germany but are non-German citizens, or whose mother/father is not German born or has non-German nationality are called *second generation immigrants*.[14]

[12]The term *guest worker* refers to foreigners who came to Germany in the course of the *guest worker recruitment* beginning in the 1950s. Until the mid70s Germany signed treaties with several Souther European countries (Italy, Greece, Spain, Turkey, Portugal and Yugoslavia) to recruit predominately low skilled laborers to work in low qualified sectors. For more detailed and comprehensive information on Germany's immigration history see, for instant, Kalter and Granto (2007)

[13]In cases where there is no information available about country of birth for the immigrant and his/her parents, nationality is taken as a single criteria to determine immigrant status.

[14]In case both parents are not born in Germany but also not born in the same country, the country of origin of the mother is assumed to outweigh the country of origin of the father. According to this 'classical' role allocation within the family, the mother raises the children while the father works to earn the money. Consequently, the influence, including cultural aspects, of the mother

Another peculiarity in Germany are the *Aussiedler*. Those are people of German descent who moved to Germany, predominantly from Eastern Europe, and were granted German citizenship upon arrival by virtue of their ethnicity and family history. Between 1950 and 2005, *Aussiedler* came mainly from Poland, Hungary, Romania, and states that formerly belonged to the Soviet Union, Czechoslovakia, and Yugoslavia. They are counted as Germans in official statistics that use nationality as the single criteria for immigrant status. However, the definition of immigrant status in this paper defines *Aussiedler* as belonging to the group of immigrants since emphasis is put on cultural differences and German-specific knowledge of partners. Consequently, *Aussiedler* are treated as part of the immigrant population and do not take on an exceptional role even though their language abilities are often more advanced and they may feel more attached to Germany due to their German ancestry.[15]

Consequently, *Natives* are persons born in Germany, holding German citizenship, and whose parents are both German-born with German citizenship. *Intermarriage* is defined as marriage and marriage-like partnership between an immigrant and a native person. All other relationship types, where both individuals

on the child is assumed to be greater than the influence of the father. Therefore, it is assumed that cultural knowledge is transferred from the mother to the child rather than from the father. This argumentation is in line with cross-cultural psychology literature as represented by Phinney et al. (2001) and Warikoo (2005). However, the number of cases is negligible in the data underlying this study.

[15]Starting in 2005, the German Statistical Office uses new rules to define immigrants and their children: 'migration background'. The foreign born have a migration background, within which is their 'own migration experience'. Their children and grandchildren have a migration background but are called 'persons without own migration experience'. A child with a native parent and a foreign-born parent, therefore, has a migration background but without their own migration experience. According to the 2005 definition, *Aussiedler* are included in the 'migration background' category and in the subcategory of 'own migration experience'. Thus the definition of immigrants and classification of *Aussiedler* used in this paper principally resembles that of 'migration background' in Germany's micro census.

are immigrants, are considered *Intra-immigrant Marriage*. This makes a marriage between a Turkish man and a Polish woman an intra-immigrant marriage even though both have different ethnic backgrounds. This definition emphasizes that the benefits of intermarriage, if present, result from the German-specific knowledge of one spouse. *Marriage* in this context does not refer to legal marital status but to a partner of the opposite sex living in the same household. Hence, marriage is put on level of partnership and cohabitation respectively. However, the majority of those who report a partner living in the same household also report to be legally married.

5 Data

The empirical analysis uses data from the German Socio-Economic Panel (SOEP). The SOEP is a representative longitudinal survey started in 1984.[16] The 2007 survey includes information for about 20,000 individuals and 11,000 private households. This data source provides information for a variety of social and economic issues. Due to its panel design and an over sampling of immigrants, it opens excellent possibilities for empirical research and is especially suited to analyze intermarriage behavior at the individual level.[17]

The analysis focuses on potential earning effects for the working population, hence persons aged 20 to 65 who are currently not unemployed and not enrolled in school. Arguments related to the productivity hypothesis are more convincing for immigrants who are not born in Germany. Thus, the focus lies on first generation

[16]For more detailed information about the SOEP see Wagner, Frick and Schupp (2007).

[17]SOEP sample weights for foreigners relies upon a different definition of immigrant status. Thus, SOEP weighting factors are not used in this analysis.

immigrants.[18]

The underlying unbalanced sample consists of 3,522 first generation men and 3,341 first generation women.[19] The majority of male immigrants (79.4 percent) report a partner at least once during the oberserved time. For immigrant women the number is quite similar: 82.5 percent report a partner at least once. This leaves 20.6 and 17.5 percent, respectively, single throughout the study duration. Those who report a partner predominately live with immigrant partners (65.6 percent of men and 68.2 percent of women). Among immigrant men only 13.9 percent ever live with a native women, and only 14.3 percent of the immigrant women report a native male partner.[20]

Among immigrants coming from one of the five sending countries during the guest worker period in the 1950s and 1960s - Turkey, former Yugoslavia[21], Greece, Italy, and Spain - men with Turkish roots are especially unlikely to inter-

[18]Results for all immigrants and those who immigrated after the age of ten are available upon request.
One could argue that with increasing age, one loses the ability to quickly learn a new language. Hence, immigrants who come to Germany at an older age face greater difficulties learning German than immigrants arriving at a younger age. Therefore, immigrant children who come at very young ages, might not be remarkably different in their language acquisition from children who are born in Germany to immigrant parents. Thus, separately considering first generation immigrants who immigrated after the age of ten, accounts for possible differences in language proficiency between immigrants born in the host country or who came at early ages on the one hand, and those who immigrated later in life on the other hand. Moreover, ten is the earliest age at which children finish primary school and are sorted into secondary education. Thus, using ten as a cut off point makes the sample more homogeneous in terms of primary education and language acquisition. However, the results do not change essentially with this modification and statistical significance changes most probable due to different sample sizes.

[19]Sample attrition is assumed to be random and unrelated to marriage. It thus presumably does not bias the results.

[20]Immigrants who report a partner whose immigrant status is not defined are dropped from the sample. Furthermore, those who switch between native and immigrant partners are also excluded from the analysis due to ambiguous results. This restriction seems harmless since only few people switch between native and immigrant partners, and the number of cases where partner's ethnic origin is not definable is also negligible.

[21]includes immigrants from Croatia, Bosnia and Herzegovina, Macedonia, Slovenia and Kosovo-Albania

marry while Italian men are particularly often in partnerships with natives, Table 1. Hence, with respect to intermarriage, Italian men seem to be more integrated than others. The influx of Polish and Russian immigrants - partly including *Aussiedler* - developed more recently and those ethnic groups are less well established in the German society. However, women from Poland are especially often intermarried, while women with Turkish origin very seldom live with German men, Table 2.[22]

Table 1: Marriage Patterns of 1st Gen. Immigrant Men

	Single	**Eventually Married with**		**Total**
		Immigrant *Mig*	**Native** *Nat*	
Immigrant Men	725	2,309	488	3,522
	20.58%	65.56%	13.86%	
By Selected Ethnic Origin				
Turkey	168	689	39	896
	18.75%	76.90%	4.35%	[25.44%]
Ex-Yugoslavia	88	324	43	455
	19.34%	71.21%	9.45%	[12.92%]
Greece	52	211	17	280
	18.57%	75.36%	6.07%	[7.95%]
Italy	84	284	78	446
	18.83%	63.68%	17.49%	[12.66%]
Spain	58	146	29	233
	24.89%	62.66%	12.45%	[6.62%]
Poland	54	154	34	242
	22.31%	63.64%	14.05%	[6.87%]
Russia	39	125	5	169
	23.08%	73.96%	2.96%	[4.80%]
Other	182	376	243	801
	22.72%	46.94%	30.34%	[22.74%]

Source: German Socio-Economic Panel (SOEP), unbalanced panel from 1984-2007
First generation immigrants aged 20 to 65, unweighted sample.
Percentage share on total immigrant population in [ ].

Regarding selected characteristics presented in Tables 3 and 4, intermarrying immigrants - both men and women - have on average more years of schooling, spent more years in Germany and had more full-time labor market experience than other immigrants. Self-reported language skills of those who eventually live with natives are significantly better than of those who marry other immigrants.

[22] As seen in the tables, small sample sizes do not allow for separate regressions differentiated by ethnic group.

Table 2: Marriage Patterns of 1st Gen. Immigrant Women

	Single	**Eventually Married with**		**Total**
		Immigrant	**Native**	
		Mig	*Nat*	
Immigrant Women	583	2,279	479	3,341
	17.45%	68.21%	14.34%	
By Selected Ethnic Origin				
Turkey	124	667	7	798
	15.54%	83.58%	0.88%	[23.89%]
Ex-Yugoslavia	93	321	33	447
	20.81%	71.81%	7.38%	[13.38%]
Greece	31	210	5	246
	12.60%	85.37%	2.03%	[7.36%]
Italy	42	246	24	312
	13.46%	78.85%	7.69%	[9.34%]
Spain	29	147	8	184
	15.76%	79.89%	4.35%	[5.51%]
Poland	64	166	57	287
	22.30%	57.84%	19.86%	[8.58%]
Russia	25	122	22	169
	14.79%	72.19%	13.02%	[5.06%]
Other	175	400	323	898
	19.49%	44.54%	35.97%	[26.88%]

Source: German Socio-Economic Panel (SOEP), unbalanced panel from 1984-2007
First generation immigrants aged 20 to 65, unweighted sample.
Percentage share on total immigrant population in [ ].

Thereby, language proficiency is measured on a scale ranging from 1 to 5, with 1 referring to "very poor" language skills and 5 to "very good" abilities.[23] Generally, writing skills are poorer compared to oral qualification regardless of marriage type but it is better for intermarrying immigrants.

The share of unemployed, including persons enrolled in school, is especially high among women who marry within the immigrant community. Intermarried immigrant women, on the other hand, have the lowest unemployment. The share of unemployed intermarried immigrant men does not differ much from that of men in intra-immigrant marriage, although it is particularly smaller than that of singles. Average earnings are highest for intermarried immigrants. However, sin-

[23]Information on language evaluation is not available for all years. It is reported only in 1997, 1999, 2001, 2003 and 2005. The variable is linearly interpolated for the missing years between 1997 and 2005 and extrapolated for the remaining years. To ease interpretation, the scale is reversed. In the survey 1 denoted "very good" language abilities and 5 "very poor" skills.

gle immigrant women earn more than women in intra-immigrant marriage, while single immigrant men earn far less than men in intra-immigrant marriage.

Table 3: Selected Characteristics for 1st Gen. Immigrant Men

	Single	**Eventually Married with**	
		Immigrant	**Native**
		Mig	*Nat*
Years of Schooling	10.13 (2.16)	9.97 (2.11)	11.45 (2.84)
Speaking Abilities(1)	3.95 (0.96)	3.51 (0.89)	4.38 (0.71)
Writing Abilities(1)	3.40 (1.36)	2.79 (1.17)	3.74 (1.09)
Years since immigration	17.15 (8.24)	19.29 (8.78)	23.54 (11.15)
Share unemployed or enrolled in school	38.67%	21.89%	20.89%
Full-time Experience	9.87 (9.98)	16.00 (8.96)	16.95 (11.53)
Earnings(2)	1,766 (894)	2,254 (1,043)	2,680 (1,927)

Source: German Socio-Economic Panel (SOEP), unbalanced panel from 1984-2007
First generation immigrants aged 20 to 65.
Unweighted averages of pooled sample; Standard deviation in parenthesis.
(1): Measured on a scale from 1 ("none at all") to 5 ("very good")
(2): Inflation-adjusted monthly labor gross earnings

Table 4: Selected Characteristics for 1st Gen. Immigrant Women

	Single	**Eventually Married with**	
		Immigrant	**Native**
		Mig	*Nat*
Years of Schooling	10.43 (2.77)	9.43 (2.18)	11.98 (2.82)
Speaking Abilities[1]	3.96 (1.04)	3.30 (1.06)	4.46 (0.72)
Writing Abilities[1]	3.47 (1.40)	2.59 (1.30)	4.04 (1.10)
Years since immigration	18.27 (9.09)	17.64 (8.85)	21.75 (12.22)
Share unemployed or enrolled in school	43.62%	53.36%	41.52%
Full-time Experience	10.05 (10.50)	7.66 (8.19)	9.72 (9.54)
Earnings[2]	1,488 (902)	1,330 (787)	1,521 (1,182)

Source: German Socio-Economic Panel (SOEP), unbalanced panel from 1984-2007
First generation immigrants aged 20 to 65.
Unweighted averages of pooled sample; Standard deviation in parenthesis.
(1): Measured on a scale from 1 ("none at all") to 5 ("very good")
(2): Inflation-adjusted monthly labor gross earnings

6 Empirical Results

The study focuses on first generation male immigrants assuming that (a) men generally benefit from marriage in terms of earnings, (b) effects steming from a

native partner are more valuable for the non-native partner, and (c) considering only males avoids selection issues related to female employment. Nevertheless, regressions are run also for immigrant women, even though results need to be treated carefully.[24]

The dependent variable is the logarithm of inflation-adjusted monthly labor gross earnings.[25] Apart from successively added marital variables, the baseline specification includes experience and its square term only. Further explanatory variables such as dummy variable indicating the highest schooling degree, self-reported language abilities[26], tenure and its square, firm size, actual hours worked, and dummy variables accounting for full-time employment status, region, and industry are included in the regressions presented in the last columns of the tables.

For first generation male immigrants, the effect of marriage - regardless of partner descent - amounts to a 12 percent change in earnings according to the OLS results given in the first column of Table 5. Distinguishing the influence of marriage by migration background of the partner leads to a large increase for those with native partners and a severe decrease for intra-immigrant marriage, Column 2. The effects are not only significantly different from zero but also from each other. Thus, while ignoring self-selection, intermarriage seems highly beneficial

[24]Due to a lack of persuasive exclusion restrictions, a selection correction such as suggested by Heckman would rely on the non-linearity of the model only. Because of this caveat no such a correction is made. But, since individual characteristics presumably determine selection into labor force participation, the fixed effects model, at least partly, accounts for possible selection biases. Results for the whole male and female immigrant population as well as for those who immigrated after the age of ten are available upon request. However, except for slight differences in significance levels, the main results do not change with the modification of the samples.

[25]Earnings are adjusted by multiplication with the consumer price index. They are expressed in year 2000 earnings. This adjustment makes the use of year dummies redundant and thereby decreases the number of explanatory variables. Results do not change in principle if unadjusted earnings in combination with year dummies are used.

[26]This information is only available for foreigners but not for German nationals.

Table 5: Earnings Regressions - 1st Gen.Immigrant Men

Dep. Var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Earnings	OLS - 1	OLS - 2	FE - 1	FE - 2	FE - 3	FE - 4	FE - 5
Married	0.116***						
	(0.02)						
Nat		0.217***	0.071	0.067	0.077	0.065	0.051
		(0.03)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
$Nat \times ExpDiff$				-0.001	-0.008	-0.012	-0.014
				(0.00)	(0.01)	(0.01)	(0.01)
$Nat \times ExpDiff^2$						0.000	0.000
						(0.00)	(0.00)
$\bar{Nat} \times Exp$					0.008	0.018	0.014
					(0.01)	(0.01)	(0.01)
$\bar{Nat} \times Exp^2$						-0.000	-0.000
						(0.00)	(0.00)
Mig		0.096***	0.087***	0.091***	0.090***	0.093***	0.083***
		(0.02)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
$Mig \times ExpDiff$				-0.004	0.001	0.004	0.006
				(0.00)	(0.01)	(0.01)	(0.01)
$Mig \times ExpDiff^2$						-0.000	-0.000**
						(0.00)	(0.00)
$\bar{Mig} \times Exp$					-0.005	-0.008	-0.011
					(0.01)	(0.01)	(0.01)
$\bar{Mig} \times Exp^2$						0.000	0.000
						(0.00)	(0.00)
Exp	0.020***	0.022***	0.028***	0.030***	0.031***	0.030**	0.028*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Exp^2	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Add.Expl.(1)	No	No	No	No	No	No	Yes
Constant	7.343***	7.336***	7.277***	7.245***	7.269***	7.277***	6.214***
	(0.03)	(0.03)	(0.02)	(0.04)	(0.05)	(0.05)	(0.13)
N	19865	19865	19865	19865	19865	19865	15919

Source: German Socio Economic Panel (SOEP), unbalanced panel 1984 - 2007, unweighted sample immigrants aged 20-65; not unemployed, not enrolled in school, report positive earnings
Robust Standard Errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
(1): Dummy for highest schooling degree, hours worked, tenure, full-time dummy, firm size, region and industry dummies, imputation flag.

Table 6: Earnings Regressions - 1st Gen.Immigrant Women

Dep. Var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Earnings	OLS - 1	OLS - 2	FE - 1	FE - 2	FE - 3	FE - 4	FE - 5
Married	-0.225***						
	(0.03)						
Nat		-0.211***	-0.106*	-0.108*	-0.109*	-0.103	-0.046
		(0.05)	(0.05)	(0.05)	(0.05)	(0.06)	(0.05)
$Nat \times ExpDiff$				-0.002	-0.000	-0.005	0.001
				(0.01)	(0.01)	(0.02)	(0.01)
$Nat \times ExpDiff^2$						0.000	0.000
						(0.00)	(0.00)
$\bar{Nat} \times Exp$					-0.004	-0.016	0.006
					(0.01)	(0.02)	(0.02)
$\bar{Nat} \times Exp^2$						0.000	-0.000
						(0.00)	(0.00)
Mig		-0.228***	-0.117***	-0.104**	-0.108**	-0.116**	-0.018
		(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.03)
$Mig \times ExpDiff$				-0.005	-0.004	0.009	-0.001
				(0.00)	(0.01)	(0.01)	(0.00)
$Mig \times ExpDiff^2$						-0.001***	-0.001*
						(0.00)	(0.00)
$\bar{Mig} \times Exp$					-0.004	-0.016	0.002
					(0.01)	(0.02)	(0.01)
$\bar{Mig} \times Exp^2$						0.000	0.000
						(0.00)	(0.00)
Exp	0.069***	0.069***	0.045***	0.049***	0.051***	0.058***	0.024*
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)
Exp^2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001**	-0.000
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Add.Expl.(1)	No	No	No	No	No	No	Yes
Constant	6.766***	6.766***	6.815***	6.779***	6.788***	6.804***	5.320***
	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.31)
N	12248	12248	12248	12248	12248	12248	9126

Source: German Socio Economic Panel (SOEP), unbalanced panel 1984 - 2007, unweighted sample immigrants aged 20-65; not unemployed, not enrolled in school, report positive earnings
Robust Standard Errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
(1): Dummy for highest schooling degree, hours worked, tenure, full-time dummy, firm size, region and industry dummies, imputation flag, dummy for children living in the household.

over marriage with another immigrant.

However, once personal heterogeneity is accounted for results change noticeably, Column 3.[27] The effect of intermarriage is reduced drastically in magnitude and loses significance compared to single immigrants. This implies that the effect of intermarriage is overestimated in the OLS model and the coefficient is upward biased if unobserved factors are ignored.[28]

Even though there seems to be no statistically significant effect from intermarriage compared to singles, the difference between effects from intermarriage and intra-immigrant marriage is also not statistically significant. This finding remains unchanged when further marital variables are added to account for development during marriage and general advantages of either marriage type. Thus, intermarriage does not appear to be beneficial to intra-immigrant marriage once selection is taken into account.

Although there seems to be no immediate advantage from one type of marriage over the other, there are significant differences in the returns to experience for those who eventually intermarry and those who eventually marry an immigrant partner. Those who will live with a native some time during their observation, receive greater returns to experience than those who only live with immigrant partners. This difference becomes significant when the model accounts for non-linearity in the returns to experience, Column 6. Adding further explanatory

[27] According to the Hausman-Taylor Test the Null-hypothesis of zero correlation between the explanatory variables and the unobserved heterogeneity is rejected. Thus, a random effects model would lead to inconsistent estimates whereas the fixed effects model is consistent - even though it might not be fully efficient.

[28] Insignificance of intermarriage compared to singles could also stem from little variance in the indicator variable. Identification comes from those who switch between being single and intermarriage. This identification is relatively limited since only 53 immigrant men switch between being single and reporting native partners.

variables does not affect these main results, Column 7.

As opposed to men, no marriage premium is found for women, Table 6. Contrarily, women seem to receive a 'penalty' from marriage in comparison to singles. However, there is no significant difference between the effect of intermarriage and intra-immigrant marriage in any specification. The magnitude of the marriage coefficients is halved when individual fixed effects are taken into account, indicating that negative influences are overestimated in the OLS model. The coefficients decrease even further and finally lose significance when additional explanatory variables are included. These variables control for observable personal and job related characteristics and seem to explain most of the negative effects.

Native men generally benefit from marriage even after controlling for unobservable factors. However, there are no significant differences between intermarriage and marriage with natives, neither in OLS nor in FE specification. In contrast to immigrant men, experience gained during marriage with natives contributes positively for native men, although there seems to be no significant effect from experience gained during intermarriage. No differences in returns to experience are found between those who ever intermarry and those who do not. This is consistent with the assumption that differences in returns to experience signal greater commitment which is only convincing for immigrants.

Similar to immigrant women, native women do not seem to benefit from marriage. However, for native women intermarriage seems to be less harmful than marriage to other natives - both with and without controlling for individual fixed effects. In particular, apparent disadvantages from intermarriage disappear once unobserved factors are taken into account and especially when controlling for additional observable characteristics.

Table 7: Earnings Regressions - Native Men

Dep. Var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Earnings	OLS - 1	OLS - 2	FE - 1	FE - 2	FE - 3	FE - 4	FE - 5
Married	0.170***						
	(0.01)						
Mig		0.209***	0.122*	0.120*	0.116*	0.123*	0.099
		(0.03)	(0.05)	(0.05)	(0.06)	(0.06)	(0.05)
$Mig \times ExpDiff$				0.001	0.005	0.005	0.007
				(0.00)	(0.01)	(0.01)	(0.01)
$Mig \times ExpDiff^2$						-0.000	-0.000
						(0.00)	(0.00)
$\bar{Mig} \times Exp$					-0.006	-0.012	-0.010
					(0.01)	(0.01)	(0.01)
$\bar{Mig} \times Exp^2$						0.000	0.000
						(0.00)	(0.00)
Nat		0.168***	0.082***	0.077***	0.076***	0.067***	0.039***
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
$Nat \times ExpDiff$				0.002	0.003*	0.009***	0.009***
				(0.00)	(0.00)	(0.00)	(0.00)
$Nat \times ExpDiff^2$						-0.000***	-0.000***
						(0.00)	(0.00)
$\bar{Nat} \times Exp$					-0.003	-0.005	-0.004
					(0.00)	(0.00)	(0.00)
$\bar{Nat} \times Exp^2$						0.000	0.000
						(0.00)	(0.00)
Exp	0.045***	0.045***	0.046***	0.045***	0.047***	0.049***	0.038***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Exp^2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Add.Expl.(1)	No	No	No	No	No	No	Yes
Constant	7.236***	7.236***	7.180***	7.201***	7.212***	7.212***	5.654***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.21)
N	84189	84189	84189	84189	84189	84189	76022

Source: German Socio Economic Panel (SOEP), unbalanced panel 1984 - 2007, unweighted sample
immigrants aged 20-65; not unemployed, not enrolled in school, report positive earnings
Robust Standard Errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
(1): Dummy for highest schooling degree, hours worked, tenure, full-time dummy,
firm size, region and industry dummies, imputation flag.

One possible explanation for different effects on immigrants and natives as well as for men and women may be different resource allocation within intermarriage: Native partners may be less likely to be discriminated against in the native labor market and thus more likely to have positive earnings. Their earnings might even exceed that of the immigrant partner because of their comparable advantage. Therefore immigrants who live with natives might work less, take on lower paying jobs or work in occupations that do not match their qualification perfectly to promote partner's labor market success. In this case, the immigrant partner appears to be experiencing a 'penalty' from living with a native while the native partner receives a 'bonus' from intermarriage.[29]

In contrast, immigrants in intra-immigrant relationships as well as native men might follow more 'traditional' gender roles where the husband works and the wife takes care of the household. The husband may than benefit from this household specialization. In addition, as pointed out by Baker and Benjamin (1997), intra-immigrant couples may have specific role allocations which favor men's abilities exceptionally. Accordingly, immigrant wives tend to accept any offered occupation upon arrival in order to support their husbands' human capital accumulation. Later, wives retire from the labor market and specialize in household production.[30] This gives rise to the presumption that gender roles in intermarriage may differ from other marital constellations. However, by now this assumption is pure speculation and needs thoroughly verification.

[29]This argument is related to those given to explain working spouse penalties, discussed, for instance, by Jacobsen and Rayack (1996); Hotchkiss and Moore (1999); and Song (2007).

[30]Furthermore, intermarried immigrants might not have immigrated for economic reasons. That is, those who immigrated on grounds of marriage with nationals might be less prepared and face more difficulties finding a well paying job than immigrants who based their decision to immigrate on expected economic success.

Table 8: Earnings Regressions - Native Women

Dep. Var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log Earnings	OLS - 1	OLS - 2	FE - 1	FE - 2	FE - 3	FE - 4	FE - 5
Married	-0.213***						
	(0.01)						
Mig		-0.078*	0.018	0.025	0.062	0.070	0.134*
		(0.04)	(0.05)	(0.05)	(0.05)	(0.06)	(0.05)
$Mig \times ExpDiff$				-0.003	-0.017*	-0.019	-0.019*
				(0.00)	(0.01)	(0.01)	(0.01)
$Mig \times ExpDiff^2$						0.000	0.000
						(0.00)	(0.00)
$\bar{Mig} \times Exp$					0.013	-0.003	0.008
					(0.01)	(0.01)	(0.01)
$\bar{Mig} \times Exp^2$						0.000*	0.000
						(0.00)	(0.00)
Nat		-0.221***	-0.102***	-0.102***	-0.105***	-0.109***	-0.015
		(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
$Nat \times ExpDiff$				-0.000	0.002	0.008*	0.005*
				(0.00)	(0.00)	(0.00)	(0.00)
$Nat \times ExpDiff^2$						-0.000**	-0.001***
						(0.00)	(0.00)
$\bar{Nat} \times Exp$					-0.004	-0.012*	0.002
					(0.00)	(0.01)	(0.00)
$\bar{Nat} \times Exp^2$						0.000	0.000
						(0.00)	(0.00)
Exp	0.061***	0.061***	0.042***	0.043***	0.045***	0.051***	0.030***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Exp^2	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Add.Expl.[(1)]	No	No	No	No	No	No	Yes
Constant	6.836***	6.835***	6.835***	6.833***	6.840***	6.843***	5.140***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.27)
N	66082	66082	66082	66082	66082	66082	58208

Source: German Socio Economic Panel (SOEP), unbalanced panel 1984 - 2007, unweighted sample
immigrants aged 20-65; not unemployed, not enrolled in school, report positive earnings
Robust Standard Errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
(1): Dummy for highest schooling degree, hours worked, tenure, full-time dummy,
firm size, region and industry dummies, imputation flag, dummy for children living in the household.

7 Conclusion

Apart from educational and economic similarity, intermarriage is generally considered a measure of social integration. Additionally, intermarriage is suspected of affecting the economic performance of immigrants as native spouses may foster linguistic adjustment, provide access to certain networks, and help adaptation to the host country's society. However, enhanced productivity of intermarried immigrants might not stem from the native partner directly, but might be attributed to other productivity characteristics that simultaneously drive economic success and partner choice. Thus, accounting for endogeneity is crucial in the context of intermarriage and economic integration. To do so, a fixed effects framework is chosen to measure the effect of intermarriage on earnings. The advantageous structure of the data allows accounting for unobserved heterogeneity and to incorporate different times at which intermarriage might influence individual earnings.

The econometric model considers short and long term effects of intermarriage in contrast to singles and those in an intra-immigrant marriage, and tests the assumption that marital choice signals different human capital accumulation. Accordingly, immigrants who marry natives may obtain greater returns to labor market experience because they better adapt to foreign customs and norms. In that case, the decision to intermarry signals greater commitment and generally better labor market integration of intermarrying immigrants.

Empirical findings for immigrant men indicate that immediate effects from intermarriage are present and exceed that of intra-immigrant marriage in the simple OLS model. However, the corresponding coefficients decrease and lose significance once unobserved abilities are accounted for. There seems to be no sig-

nificant difference between intermarriage and marriage among immigrants after selection issues are taken into account. However, those who intermarry receive greater returns to experience than those who exclusively live with other immigrants. This indicates better general labor market integration of those intermarrying. Findings imply that selection into intermarriage based on individual time-invariant characteristics is crucial and finding a native partner works as a signal for an advantageous economic status.

Immigrant women seem not to benefit from either type of marriage. However, negative effects are mitigated when accounting for unobservable factors and including additional explanatory variables. Native women in particular benefit from marriage with immigrant men. Though, there are no effects from intermarriage for native men.

Finding different effects for immigrants and natives as well as for men and women possibly indicates different human capital allocations within each type of partnership. Further research should concentrate on possibly different gender roles within intermarriage and explanations offered in this study need to be verified.

Moreover, other economic productivity measures should be considered. As intermarriage might affect wages indirectly via access to better jobs and enhanced labor force participation, research on the effect of intermarriage on self-employment and employment rates or types of occupations as done by Georgarakos and Tatsiramos (2009), Furtado and Theodoropoulos (2009a) and (2009b) for immigrants in the United States is also desirable for immigrants living in Germany. Furthermore, possible economic effects of intermarriage for immigrants women should be considered in greater depth. In this regard, special difficulties related to selection into labor force participation need to be taken into account.

Thus, various aspects of whether and how intermarriage is related to economic success are not yet explored exhaustively leaving highly interesting questions still unanswered and encouraging further research on this very fascinating topic.

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